

REMARKS

Claims 1 and 3-18 are now in the application. By this Amendment, claims 1, 3-5, 10, 13, and 14 have been amended. Support for the amendment to claim 1 is found at least at original claim 2, which has been canceled without prejudice or disclaimer. Claims 3-5, 10, 13, and 14 have been amended to correct informalities and to improve the form of these claims. No new matter has been added.

Claims 1-18 have been rejected under 35 U.S.C. §112, first paragraph, because the specification is not considered to enable a skilled artisan to prepare all quaternary phosphonium salts within the scope of claim 1. Claim 1 has been amended as suggested on page 7, lines 5-9, of the Office Action.

Claim 14 has been rejected under 35 U.S.C. §112, second paragraph, for reciting a use. Claim 14 has been amended to obviate this rejection. Further, the amendment to claim 1 provides proper antecedent basis for the claim feature “formula I” in claim 14.

Claim 14 has been rejected under 35 U.S.C. §101 for reciting a use. The amendment to claim 14 obviates this rejection.

Claims 1-18 have been rejected under 35 U.S.C. §102(b) as being anticipated by Taira et al. CAS: 138:255045; (2) Yamano et al. CAS: 136:6169; (3) Niwa et al. CAS:121:175536; (4) Ito et al. CAS: 110:231910; (5) Sliwka et al. CAS: 109:55001; or (6) Bestmann et al. CAS: 105:60777.

Claim 1 recites, among other features, wherein the reaction is conducted in a ternary solvent mixture. At least this feature cannot reasonably be considered to be suggested by the applied citations.

As set forth on page 3, lines 27—28, of Applicants’ disclosure, a ternary solvent mixture is a composition of matter which comprises three different solvent components and preferably consists of three different solvent components.

Taira suggests the transformation of nitrophenyl propenol compounds with triphenylphosphine. In every instant, the triphenyl phosphonium salt is prepared in a reaction step in which triphenylphosphine is dissolved in chloroform as the sole solvent. It should be noted that the synthesis suggested in Taira comprises two or more reaction steps indicated above and below the reaction arrows. For example, in reaction 47 HBr is used in the second reaction step together with zinc in ethanol. However, in that reaction step ethanol is the only solvent and no triphenylphosphine is present.

Yamano suggests a multistep transformation in which HBr is used in the first step and a phosphine is used in the second step. No transformation in a ternary solvent mixture in the presence of an acid is disclosed.

Niwa suggests a transformation with triphenylphosphine in the presence of HCl as an acid in a sole solvent: methanol. No ternary solvent mixture is described.

Ito suggests a process for the preparation of a quaternary phosphonium salt by the reaction of the corresponding alcohol with triphenylphosphine in the presence of HBr (actually the hydrobromide salt is used) in methanol as the sole solvent. No ternary solvent mixture is disclosed.

Sliwka suggests a process for the production of specific quaternary phosphonium salts by the reaction of the corresponding alcohols with the hydrobromide of triphenylphosphine in a binary solvent mixture of methanol and chloroform. No ternary solvent mixture is used.

Finally, Bestmann suggests a process for the production of one specific quaternary phosphonium salt by reacting the corresponding alcohol with triphenylphosphine in the presence of HCl as an acid in methanol as the sole solvent. No ternary solvent mixture is described.

Accordingly, none of the citations applied in the Office Action can reasonably be considered to suggest the above-quoted feature of claim 1 as they collectively fail to disclose a ternary solvent mixture as reaction medium. As such, the applied citations fail to provide all of

the associated benefits of the claimed subject matter discussed throughout the application. By way of non-limiting example, and as described on page 11, lines 14-18, of Applicants' disclosure, it is one particular advantage of the claimed subject matter that, by means of the suitable composition of the ternary solvent mixture, the unwanted precipitation or crystallization of the phosphonium salts to be synthesized can generally be very largely prevented. As a result, the process described is also particularly suitable for industrial scale reactions carried out continuously.

In view of the above amendment, Applicants believe the pending application is in condition for allowance.

If the Examiner believes an interview may be helpful in further prosecution of this application, the undersigned is available at the telephone number set forth below.

Applicants believe no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 22-0185, under Order No. 12810-00254-US1 from which the undersigned is authorized to draw.

Dated: December 15, 2008

Respectfully submitted,

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